## **CLAIMS**

1. A charge transport compound having the following formula:

where R is an (N,N-disubstituted)arylamine group;

Q comprises an aromatic hydrazone linking group;
Y comprises a bridging group between R-Q- groups; and

n is an integer between 2 and 6.

- 2. The charge transport compound of claim 1 wherein Y is a methylene group, a bond, S, or O and n is 2.
  - 3. The charge transport compound of claim 1 wherein Q has the formula:

- where Z is an aryl group; and X is a linking group comprising -(CH<sub>2</sub>)<sub>m</sub>-, where m is an integer between 1 and 20, inclusive, and one or more of the methylene groups is optionally replaced by an oxygen atom, a carbonyl group, a -NR<sub>6</sub> group, a CHR<sub>7</sub> group, or a CR<sub>8</sub>R<sub>9</sub> group where R<sub>6</sub>, R<sub>7</sub>, R<sub>8</sub>, and R<sub>9</sub> are, independently, H, an alkyl group, or aryl group.
- 20 4. The charge transport compound of claim 3 wherein Z comprises a phenyl group.
  - 5. The charge transport compound of claim 3 wherein X is  $-(CH_2)_m$  where m is an integer between 1 and 20.
- 25 6. The charge transport compound of claim 1 wherein the (N,N-disubstituted)arylamine group comprises a triarylamine group.
  - 7. The compound of claim 6 wherein the triarylamine group has the formula:

where  $R_{10}$ ,  $R_{11}$ , and  $R_{12}$  are, independently, H, an alkyl group, or aryl group.

- 8. The charge transport compound of claim 1 wherein Y comprises a bond, nitrogen atom, oxygen atom, sulfur atom, a branched or linear -(CH<sub>2</sub>)<sub>p</sub>- group where p is an integer between 1 and 10, a cycloalkyl group, or a cyclosiloxyl group.
  - 9. An organic photoreceptor comprising:
  - (a) a charge transport compound having the formula

10 (R-Q)n-Y

where R is an (N,N-disubstituted)arylamine group;

Q comprises an aromatic hydrazone linking group;

Y comprises a bridging group between R-Q- groups; and n is an integer between 2 and 6;

- (b) a charge generating compound; and
  - (c) an electrically conductive substrate on which the charge transport compound and the charge generating compound are located.
- 10. The organic photoreceptor of claim 9 wherein Y is a methylene group, a bond, S, or O and n is 2;
  - 11. The organic photoreceptor of claim 9 wherein Q is represented by the formula:

where Z is an aryl group; and X is a linking group comprising - $(CH_2)_m$ -, where m is an integer between 1 and 20, inclusive, and one or more of the methylene groups is optionally

replaced by an oxygen atom, a carbonyl group, a -NR<sub>6</sub> group, a CHR<sub>7</sub> group, or a CR<sub>8</sub>R<sub>9</sub> group where R<sub>6</sub>, R<sub>7</sub>, R<sub>8</sub>, and R<sub>9</sub> are, independently, H, an alkyl group, or aryl group.

12. The organic photoreceptor of claim 9 wherein Z comprises a phenyl group.

13. The organic photoreceptor of claim 9 wherein Y comprises a bond, nitrogen atom, oxygen atom, sulfur atom, a branched or linear -(CH<sub>2</sub>)<sub>p</sub>- group where p is an integer between 1 and 10, a cycloalkyl group, or a cyclosiloxyl group.

- 10 14. The organic photoreceptor of claim 9 wherein said organic photoreceptor is in the form of a flexible belt or a rigid drum.
  - 15. The organic photoreceptor of claim 9 comprising:

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- (a) a charge transport layer comprising said charge transport compound and apolymeric binder; and
  - (b) a charge generating layer comprising said charge generating compound and a polymeric binder.
- 16. The organic photoreceptor of claim 9 wherein the (N,N-disubstituted)arylamine group comprises a triarylamine group.
  - 17. The organic photoreceptor of claim 16 wherein the triarylamine group has the formula:

$$R_{10}$$
 $R_{10}$ 
 $R_{11}$ 

where  $R_{10}$ ,  $R_{11}$ , and  $R_{12}$  are, independently, H, an alkyl group, or aryl group.

- 18. An electrophotographic imaging apparatus comprising:
- (a) a plurality of support rollers; and
- (b) an organic photoreceptor in the form of a flexible belt threaded around said support rollers, said organic photoreceptor comprising:
  - (i) a charge transport compound having the formula

where R is an (N,N-disubstituted)arylamine group;

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Q comprises an aromatic hydrazone linking group;

Y comprises a bridging group between R-Q- groups; and n is an integer between 2 and 6;

- (ii) a charge generating compound; and
- (iii) an electrically conductive substrate.
- 19. The electrophotographic imaging apparatus of claim 18 wherein Y is a methylene group, a bond, O, or S and n is 2.
  - 20. The electrophotographic imaging apparatus of claim 18 wherein Z comprises a phenyl group.
- 21. The electrophotographic imaging apparatus of claim 18 wherein Q is represented by the formula:

where Z is an aryl group; and X is a linking group comprising - $(CH_2)_m$ -, where m is an integer between 1 and 20, inclusive, and one or more of the methylene groups is optionally replaced by an oxygen atom, a carbonyl group, a -NR<sub>6</sub> group, a CHR<sub>7</sub> group, or a CR<sub>8</sub>R<sub>9</sub> group where R<sub>6</sub>, R<sub>7</sub>, R<sub>8</sub>, and R<sub>9</sub> are, independently, H, an alkyl group, or aryl group.

22. The electrophotographic imaging apparatus of claim 18 wherein Y comprises a bond, nitrogen atom, oxygen atom, sulfur atom, a branched or linear -(CH<sub>2</sub>)<sub>p</sub>- group where p is an integer between 1 and 10, a cycloalkyl group, or a cyclosiloxyl group.

- 23. The electrophotographic imaging apparatus of claim-17 wherein the (N,N-disubstituted)arylamine group comprises a triarylamine group.
- 5 24. An electrophotographic imaging process comprising:
  - (a) applying an electrical charge to a surface of an organic photoreceptor comprising:
    - (i) a charge transport compound having the formula

10 (R-Q)n-Y

where R is an (N,N-disubstituted)arylamine group;

Q comprises an aromatic hydrazone linking group;

Y comprises a bridging group between R-Q- groups where Y comprises a bond, nitrogen atom, oxygen atom, sulfur atom, a branched or linear -(CH<sub>2</sub>)<sub>p</sub>- group where p is an integer between 0 and 10, a cycloalkyl group, or a cyclosiloxyl group; and

n is an integer between 2 and 6;

- (ii) a charge generating compound; and
- (iii) an electrically conductive substrate;
- (b) imagewise exposing said surface of said organic photoreceptor to radiation to dissipate charge in selected areas and thereby form a pattern of charged and uncharged areas on said surface;
  - (c) contacting said surface with a toner comprising colorant particles; and
  - (d) transferring said toned image to a substrate.
- 25. The electrophotographic imaging process of claim 24 wherein Y is a methylene group, a bond, O, or S and n is 2.
  - 26. The electrophotographic imaging process of claim 23 wherein Z comprises a phenyl group.

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27. The electrophotographic imaging process of claim 23 wherein Q is represented by the formula:

- where Z is an aryl group; and X is a linking group comprising - $(CH_2)_{m^-}$ , where m is an integer between 0 and 20, inclusive, and one or more of the methylene groups is optionally replaced by an oxygen atom, a carbonyl group, a -NR<sub>6</sub> group, a CHR<sub>7</sub> group, or a CR<sub>8</sub>R<sub>9</sub> group where R<sub>6</sub>, R<sub>7</sub>, R<sub>8</sub>, and R<sub>9</sub> are, independently, H, an alkyl group, or aryl group.
  - 28. The electrophotographic imaging process of claim 23 wherein Y comprises a bond, nitrogen atom, oxygen atom, sulfur atom, a branched or linear -(CH<sub>2</sub>)<sub>p</sub>- group where p is an integer between 1 and 10, a cycloalkyl group, or a cyclosiloxyl group.
- 15 29. The electrophotographic imaging process of claim 23 wherein the (N,N-disubstituted)arylamine group is a triarylamine group.
  - 30. A charge transport compound having the following formula:

wherein R is a heterocyclic group;

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Q comprises an aromatic hydrazone linking group;

Y comprises a bridging group between R-Q- groups; and

n is an integer between 2 and 6, inclusive.

25 31. The charge transport compound of claim 30 wherein the aromatic hydrazone linking group has the formula:

where Z is an aryl group; and X is a linking group having the formula

-(CH<sub>2</sub>)<sub>m</sub>-, branched or linear, where m is an integer between 1 and 20, inclusive, and one
or more of the methylene groups is optionally replaced by an oxygen atom, a carbonyl

group, urethane, urea, an ester group, a -NR<sub>6</sub> group, a CHR<sub>7</sub> group, or a CR<sub>8</sub>R<sub>9</sub> group where  $R_6$ ,  $R_7$ ,  $R_8$ , and  $R_9$  are, independently, H, an alkyl group, or aryl group; and n is an integer between 2 and 6, inclusive.

- The charge transport compound of claim 30 wherein Y comprises a bond, carbon atom, nitrogen atom, oxygen atom, sulfur atom, a branched or linear -(CH<sub>2</sub>)<sub>p</sub>-group where p is an integer between 1 and 10, an aryl group, a cycloalkyl group, a cyclosiloxyl group, a heterocyclic group, or a CR<sub>10</sub> group where R<sub>10</sub> is hydrogen atom, an alkyl group, or aryl group.
  - 33. The charge transport compound of claim 30 wherein Y comprises an aryl group or a heterocyclic group.
    - 34. An organic photoreceptor comprising:
  - (a) a charge transport compound having the formula

wherein R is a heterocyclic group;

Q comprises an aromatic hydrazone linking group;

Y comprises a bridging group between R-Q- groups; and n is an integer between 2 and 6, inclusive;

n is an integer between 2 and 6, inclusiv

(b) a charge generating compound; and

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- (c) an electrically conductive substrate.
- 35. The organic photoreceptor of claim 34 wherein the aromatic hydrazone linking group has the formula:

where Z is an aryl group; and X is a linking group having the formula  $-(CH_2)_m$ -, branched or linear, where m is an integer between 1 and 20, inclusive, and one or more of the methylene groups is optionally replaced by an oxygen atom, a carbonyl group, urethane, urea, an ester group, a  $-NR_6$  group, a  $CHR_7$  group, or a  $CR_8R_9$  group

where R<sub>6</sub>, R<sub>7</sub>, R<sub>8</sub>, and R<sub>9</sub> are, independently, H, an alkyl group, or aryl group; and n is an integer between 2 and 6, inclusive.

- 36. The organic photoreceptor of claim 34 wherein Y comprises a bond,
  carbon atom, nitrogen atom, oxygen atom, sulfur atom, a branched or linear -(CH<sub>2</sub>)<sub>p</sub>group where p is an integer between 1 and 10, an aryl group, a cycloalkyl group, a
  cyclosiloxyl group, a heterocyclic group, or a CR<sub>10</sub> group where R<sub>10</sub> is hydrogen atom, an
  alkyl group, or aryl group.
- The organic photoreceptor of claim 34 wherein Y comprises an aryl group or a heterocyclic group.